

## REMARKS/ARGUMENTS

### *Status of Claims*

Claims 13-23 stand rejected.

Claims 13 and 18 are currently amended.

Thus, claims 13-23 are pending in this patent application.

The Applicants hereby request further examination and reconsideration of the presently claimed application.

### *Claim Rejections – 35 U.S.C. § 112*

Claims 13-23 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that the Applicants regard as the invention. Specifically, the Examiner asserted that the preamble and the recording step contradicted one another. Claim 13 has been amended to clearly indicate that the call is received from a NAT server or FW that is located the first network, and that the call is processed in a proxy server that is located in a second network. In addition, the Examiner asserted that the recitation of an address, a first address, and a second address made the claim unclear. Claims 13 and 18 have been amended to overcome the rejections, thus the rejections should be withdrawn.

### *Advisory Action*

The Applicants note that the Examiner stated:

**Read does not explicitly teach** recording the address and port of a call signaling in the signaling message and the address and port of Real-time Transfer Protocol (RTP) and Real-time Transfer Control Protocol (RTCP) of a media stream in the signaling message;

**modifying the address and port of the call signaling** into the address and port of the call signaling of the second network assigned for the call;

**modifying the address and port of RTP and RTCP** into the address and port of the second network assigned for the media stream;

modifying the RTP and RTCP address and port of a media stream in the response signaling message into the recorded RTP and RTCP address and port of the media stream in the signaling message[.]

See Office Action dated September 2, 2009, pp. 7-8 (emphasis added). However, on page 2 of the Advisory Action dated October 15, 2009, the Examiner stated “**Read teaches modifying ports and addresses** for a call set up message see paragraphs 84-93.” (Emphasis added). These two positions appear to conflict with one another, and consequently the Applicants request clarification of the Examiner’s position.

***Claim Rejection – 35 U.S.C. § 103***

Claims 13-19, and 23 stand rejected under 35 U.S.C § 103 (a) as being unpatentable over U.S. Patent Application Publication 2004/0037268 (*Read*) in view of U.S. Patent Application Publication 2003/0093563 (*Young*). Claim 20 stands rejected under 35 U.S.C § 103 (a) as being unpatentable over *Read* in view of *Young* and U.S. Patent Application Publication 2002/0006780 (*Bjelland*). Claim 21 stands rejected under 35 U.S.C § 103 (a) as being unpatentable over *Read* in view of *Young* and U.S. Patent Application Publication 2004/0033806 (*Daniel*). Claim 22 stands rejected under 35 U.S.C § 103 (a) as being unpatentable over *Read* in view of *Young* and Patent Application Publication 2004/0095913 (*Westphal*). Claims 14-17 depend from independent claim 13, and claims 19-23 depend from independent claim 18. Thus, claims 13-23 stand or fall on the application of the combination of *Read* and *Young* to independent claims 13 and 18. The United States Supreme Court in *Graham v. John Deere Co. of Kansas City* noted

that an obviousness determination begins with a finding that **“the prior art as a whole in one form or another contains all” of the elements of the claimed invention.** See *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 22 (U.S. 1966) (emphasis added). The Applicants respectfully assert that the combination of *Read* and *Young* fails to disclose all of the elements of independent claims 13 and 18, and consequently fails to render obvious claims 13-23.

The combination of *Read* and *Young* fails to render obvious claims 13-23 because the combination of *Read* and *Young* fails to disclose modifying the address and port of the call signaling into the address and port of the call signaling of the second network assigned for the call. Claims 13 and 18 reads:

13. A method for implementing traversal through a Network Address Translation (NAT) server or a firewall (FW) located in a first network, the method being implemented in a proxy server located in a second network outside the NAT server or FW, the method comprising:

recording a first address and port in an IP header of a signaling message of a call received from the NAT server or FW located in the first network;

modifying the first address and port into a second address and port assigned for the call in the second network;

analyzing the information in the signaling message;

recording an address and port of a call signaling in the signaling message and an address and port of Real-time Transfer Protocol (RTP) and Real-time Transfer Control Protocol (RTCP) of a media stream in the signaling message;

**modifying the address and port of the call signaling into the address and port of the call signaling of the second network assigned for the call;**

modifying the address and port of RTP and RTCP into the address and port of the second network assigned for the media stream;

delivering the signaling message to a processing device of packet voice signaling or a service processing device in the second network;

modifying a third address and port in the IP header of a response signaling message from the processing device into the first address and port;

analyzing the information in the response signaling message;

modifying an address and port of a response signaling in the response signaling message into the recorded address and port of the call signaling in the signaling message;

modifying a RTP and RTCP address and port of a media stream in the response signaling message into the recorded RTP and RTCP address and port of the media stream in the signaling message; and

sending the response signaling message to the NAT server or FW in the first network.

18. A system for implementing traversal through a Network Address Translation (NAT) server or a firewall (FW) located in a first network, comprising:

- a packet user terminal located in the first network, for initiating and receiving services;

- the NAT server or FW, for providing services of accessing a second network for the packet user terminal and forwarding messages from and to the packet user terminal;

- a proxy server located in the second network outside the NAT server or FW, the proxy server being configured for:

  - receiving a signaling message of a call from the NAT server or FW;

  - recording a first address and port in an IP header of the signaling message;

  - modifying the first address and port into a second address and port assigned for the call in the second network;

  - analyzing the information in the signaling message, recording an address and port of a call signaling in the signaling message as well as an address and port of a media stream thereof;

  - modifying the address and port of the call signaling into the address and port in the second network assigned for the call,** and modifying the address and port of the media stream into the address and port of the second network assigned for the media stream; and

    - receiving a response signaling message sent to the packet user terminal;

  - modifying a third address and port in the IP header of the response signaling message into the first address and port;

    - analyzing the information in the response signaling message;

  - modifying an address and port of a response signaling in the response signaling message into the recorded address and port of the call signaling;

  - modifying an address and port of a media stream in the response signaling message into the recorded address and port of the media stream; and

    - delivering the response signaling message to the NAT server or FW; and

  - a soft-switching device, for providing integrated services and call control, forwarding to the proxy server the response signaling message sent to the packet user terminal when the signaling message is received.

(Emphasis added). As shown above, claims 13 and 18 recite modifying the address and port of the call signaling into the address and port of the call signaling of the second network assigned for the call. In contrast, *Young* only modifies the addresses and UDP port of the media stream's RTP:

SDPs (Session Description Protocol) in the MGCP and SIP messages are also monitored and modified so that as **connections are opened for RTP (Real-time**

**Transport Protocol) streams**, the appropriate public or private IP addresses and UDP (User Datagram Protocol) ports are used. As the MAND 1000 forwards messages from phones to the call control server 1480 of FIG. 9, SIP server or gateway, the MAND replaces the phone's private IP addresses **in the SDP Connection Info field** as well as the UDP port for each session **in the SDP Media Description field** with the MAND's public IP address and a unique public UDP port 1450.

Every inbound and outbound VoIP packet is parsed for a Session Description Protocol (SDP) field 1420 of FIG. 8. **An SDP field designates new UDP media ports for communicating RTP media.** One RTP media port 1420, inbound or outbound, is contained in each SDP request. By parsing SDP fields in the VoIP packets, the MAND dynamically opens the UDP ports to start RTP communication.

Similarly, the MAND 1000 replaces the public IP addresses and UDP port references in SDPs from the call control server, SIP server or gateway with the MAND private IP address and UDP ports. For initiation of sessions, the MAND will maintain an ALG database entry for the SIP session that should require the inclusion of Call-ID and tag to identify the session. To keep track of the connections for RTP forwarding, the MAND maintains a database map between private and public IP addresses and UDP ports. If, however, the call is from an IP phone 950 to another IP phone 950 on the same private network, the MAND does not modify the SDP or H.245 message to forward the RTP to the WAN interface 10. Instead, it sets up the connection so that the phones send RTPs directly to each other over the LAN interface 30.

*Young*, ¶¶ 75, 76, & 78 (emphasis added). As is well known, the packets communicated between the first and second networks comprise a header and a body. In addition, the body comprises a call signaling address and a RTP/RTCP address. As shown above, *Young* modifies the SDPs in the MGCP and SIP messages, where the SDPs contain the addresses and UDP port of the RTP of the media stream, but not the addresses and UDP port of the call signaling. In other words, **Young only modifies the addresses and UDP port of the RTP, not the call signaling.** Thus, *Young* fails to disclose **modifying the address and port of the call signaling** into the address and port of the call signaling of the second network assigned for the call. *Read* does not make up for the shortcomings of *Young* as *Read* also fails to disclose modifying the address and port of the call signaling into the address and port of the call signaling of the second network assigned

for the call. As such, the combination of *Read* and *Young* fails to disclose at least one element of independent claims 13 and 18, and consequently fails to render obvious claims 13-23.

### CONCLUSION

Consideration of the foregoing amendments and remarks, reconsideration of the application, and withdrawal of the rejections and objections is respectfully requested by the Applicants. No new matter is introduced by way of the amendment. It is believed that each ground of rejection raised in the Final Office Action dated September 2, 2009 and the Advisory Action dated October 15, 2009 have been fully addressed. If any fee is due as a result of the filing of this paper, please appropriately charge such fee to Deposit Account Number 50-1515 of Conley Rose, P.C., Texas. If a petition for extension of time is necessary in order for this paper to be deemed timely filed, please consider this a petition therefore.

If a telephone conference would facilitate the resolution of any issue or expedite the prosecution of the application, the Examiner is invited to telephone the undersigned at the telephone number given below.

Respectfully submitted,  
CONLEY ROSE, P.C.

Date: 11/20/09

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